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NATIONAL NUTRITION MONITORING AND RELATED RESEARCH ACT OF 1984

SEPTEMBER 25, 1984.—Ordered to be printed

Mr. FUQUA, from the Committee on Science and Technology, submitted the following

REPORT

together with

ADDITIONAL VIEWS

[To accompany H.R. 4684 which on January 30, 1984, was referred jointly to the Committee on Agriculture and the Committee on Science and Technology]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science and Technology, to whom was referred the bill (H.R. 4684) to establish a coordinated National Nutrition Monitoring and Related Research Program, and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

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The amendment strikes out all after the enacting clause of the bill and inserts a new text which appears in italic type in the reported bill.

That this Act may be cited as the "National Nutrition Monitoring and Related Research Act of 1984".

FINDINGS

SEC. 2. The Congress finds and declares that—

(1) a national nutrition monitoring system is a basic tool necessary to examine the linkages between food consumption patterns, nutritional status, and health status;

(2) a national nutrition monitoring system is essential to insure the nutritional quality of the national food supply, to insure that the nutritional needs of the public are achieved, and to insure that appropriate data bases are maintained to guide the expenditure of public funds for nutrition research and for development, education, and intervention programs designed to maintain and enhance the nutritional status of the population;

(3) scientific methods and technologies to assess nutritional and dietary status are costly, imprecise, and lack standardization;

(4) Federal efforts to collect, analyze, interpret, and disseminate dietary and nutritional status data are untimely, give inadequate attention to assessing high-risk groups and geographic areas, and lack resources for the continuous collection, processing, and analysis of dietary, nutritional, and related health status information and for the monitoring of general health trends and their relationship to food practices and supplies;

(5) nutrition monitoring and related research lacks a central Federal focus for the development, coordination, and implementation of a strategic and timely national nutrition monitoring program; and

(6) no effective means currently exist to assist State and local governments in obtaining dietary and nutritional status data and in developing related data bases and networks, or to bring together public and private interests to identify national nutritional monitoring priorities and issues, and to promote progress in a cooperative forum.

PURPOSE

SEC. 3. It is the purpose of this Act—

(1) to establish and facilitate the timely implementation of a coordinated National Nutrition Monitoring and Related Research Program and thereby establish a scientific basis for the maintenance and improvement of the nutritional status of the United States population and the nutritional quality of the United States food supply;

(2) to establish and implement a comprehensive National Nutrition Monitoring and Related Research Plan to assess on a continuing basis the dietary and nutritional status and trends of the United States population, the state-of-the-art, future monitoring and related research priorities, and the relevant policy implications of the findings;

(3) to establish and improve national nutritional and health status data and related data bases and networks, and to support research necessary to develop uniform indicators, standards, methodologies, technologies, and procedures for nutritional monitoring;

(4) to establish a central Federal focus for the coordination, management, and direction of Federal nutrition monitoring activities;

(5) to establish mechanisms for addressing the nutrition monitoring needs of Federal, State, and local governments, the private sector, scientific and engineering communities, health professionals, and the public in support of the objectives described in paragraphs (1), (2), (3), and (4); and

(6) to provide for the conduct of such scientific research and development as may be necessary or appropriate in support of such objectives.

DEFINITIONS

SEC. 4. As used in this Act—

(1) the terms "National Nutrition Monitoring and Related Research Program" and "coordinated program" mean the coordinated program established by section 101(a);

(2) the terms "Directorate for Nutrition Monitoring and Related Research" and "Directorate" mean the task force established by section 101(b);

(3) the terms "National Nutrition Monitoring and Related Research Plan" and "comprehensive plan" mean the comprehensive plan established by section 103;

(4) the term "Joint Implementation Plan for a Comprehensive National Nutrition Monitoring System" means the plan of that title submitted to the Congress in September 1981 by the Department of Agriculture and the Department of Health and Human Services, pursuant to section 1428 of Public Law 95-113; and

(5) the terms "National Nutrition Monitoring Advisory Council" and "Council" mean the advisory body established by section 201.

TITLE I—NUTRITION MONITORING AND RELATED RESEARCH

ESTABLISHMENT OF THE COORDINATED PROGRAM AND THE DIRECTORATE

SEC. 101. (a) There is hereby established a ten-year coordinated program to carry out the purpose of this Act.

(b) To implement the coordinated program there shall be formed a Directorate for Nutrition Monitoring and Related Research, of which the Secretary of Agriculture, the Secretary of Health and Human Services, and the Secretary of Defense shall be joint chairpersons. The remaining membership of the Directorate shall consist of—

(1) one representative each from the Environmental Protection Agency, the National Bureau of Standards, the Bureau of Labor Statistics, the Agency for International Development, the Veteran's Administration, and the National Science Foundation; and

(2) such additional representatives of Federal agencies as the joint chairpersons of the Directorate may deem appropriate.

(c) The Assistant Secretary for Health, Department of Health and Human Services, shall serve as the administrator of the coordinated program.

(d) The Directorate shall not be under the supervision or control of any other Federal agency or entity; but for purposes of funding and administrative services it shall be considered a part of the Department of Health and Human Services. The Directorate shall define and direct the organization and management of the Directorate and the Council.

FUNCTIONS OF THE DIRECTORATE

SEC. 102. (a) The Directorate is authorized and directed—

(1) to establish the goals of the coordinated program, identify the activities required to meet the goals, and identify the responsible agency;

(2) to update and integrate the Joint Implementation Plan for a Comprehensive National Nutrition Monitoring System into the coordinated program;

(3) to direct and assure the timely implementation of the coordinated program and the comprehensive plan established by section 103;

(4) to establish a competitive grants program, to be carried out and administered by the National Science Foundation in accordance with the provisions of this Act, to encourage and assist the conduct, by Federal and non-Federal entities on an appropriate matching funds basis, of research (including research described in section 103(a)(3)) which will accelerate the development of uniform and cost-effective standards and indicators for the assessment and monitoring of nutritional and dietary status and for relating food consumption patterns to nutritional and health status;

(5) to establish a grants program, to be carried out and administered by the Centers for Disease Control in accordance with the provisions of this Act, to encourage and assist State and local governments in developing the capacity to conduct monitoring and surveillance of nutritional status, food consumption, and nutrition knowledge and in using such capacity to enhance nutrition services (including activities described in sections 103(a)(5) and 103(b)(8));

(6) to develop an annual interagency budget for each fiscal year of the coordinated program; and

(7) to foster productive interaction between Federal efforts, State and local governments, the private sector, scientific communities, health professionals, and the public.

(b) The Directorate shall convene as necessary, but no less often than quarterly during each fiscal year of the ten-year period covered by the coordinated program.

(c) The Directorate shall submit to the President and the Congress by January 15 of each year an annual report which shall—

(1) evaluate the progress of the program under this Act;

(2) summarize the results of such program components as are developed under section 103;

(3) analyze the nutritional and related health status of the United States population, the nutritional quality of the national food supply, the relevant policy implications of the findings, and future nutrition monitoring and related research priorities; and

(4) include in full the annual report of the Council as specified in section 202.

DEVELOPMENT OF THE COMPREHENSIVE NATIONAL NUTRITION MONITORING AND RELATED RESEARCH PLAN

SEC. 103. (a) The Directorate shall prepare a comprehensive plan for the coordinated program which shall be designed—

(1) to assess, collate, analyze, and report on a continuous basis the dietary and nutritional status and trends of the United States population, the state-of-the-art, future monitoring and related research priorities, and relevant policy implications of the findings;

(2) to assess, analyze, and report on a continuous basis, for a representative sample of the low income population, food and household expenditures, participation in food assistance programs, and periods experienced when resources were not sufficient to provide an adequate diet;

(3) to sponsor or conduct research necessary to develop uniform indicators, standards, methodologies, technologies, and procedures for nutrition monitoring and surveillance;

(4) to develop and update a national dietary and nutritional status data bank, a nutrient data bank, and other data resource requirements;

(5) to assist State and local agencies in developing procedures and networks for nutrition monitoring and surveillance; and

(6) to focus the activities of the Federal agencies.

(b) The comprehensive plan shall, as a minimum, include programs to—

(1) maintain and coordinate the National Health and Nutrition Examination Survey (NHANES) and the Nationwide Food Consumption Survey (NFCS), and in future surveys provide for the continuous collection, processing, and analysis of nutritional and dietary status data through a stratified probability sample of the United States population designed to permit statistically reliable estimates of high-risk groups and geopolitical and geographic areas and to permit accelerated data analysis (including annual analysis, as appropriate):

(2) maintain and enhance other Federal nutrition monitoring efforts such as the Centers for Disease Control Nutrition Surveillance Program and the Food and Drug Administration Total Diet Study, and, to the extent possible, coordinate such efforts with the surveys described in paragraph (1);

(3) incorporate, in the survey design, military and (where appropriate) institutionalized populations;

(4) complete the analysis and interpretation of NHANES and NFCS data sets collected prior to 1984 within one year after the date of the enactment of this Act;

(5) improve the methodologies and technologies, including those suitable for use by States and localities, available for the assessment of nutritional and dietary status and trends;

(6) develop uniform standards and indicators for the assessment and monitoring of nutritional and dietary status, for relating food consumption patterns to nutritional and health status, and for use in the evaluation of Federal food and nutrition intervention programs;

(7) establish national baseline data and procedures for nutrition monitoring;

(8) provide scientific and technical asssistance training, and consultation to State and local governments for the purpose of obtaining dietary and nutritional status data and developing related data bases and networks to promote the development of a national nutritional status network;

(9) establish mechanisms to identify the needs of users of nutrition monitoring data and to encourage the private sector and the academic community to participate in the development and implementation of the comprehensive plan and contribute relevant data from non-Federal sources to promote the development of a national nutritional status network;

(10) produce an inventory of Federal, State, and nongovernment activities related to nutrition monitoring and related research;

(11) focus on national nutrition monitoring needs while building on the responsibilities and expertise of the individual membership of the Directorate;

(12) administer the coordinated program, define program objectives, priorities, oversight, responsibilities, outcomes, and resources, and define the organization and management of the Directorate and the Council; and

(13) provide a mechanism for periodically evaluating and refining the coordinated program and the comprehensive plan which facilitates cooperation and interaction by State and local governments, the private sector, scientific communities. and health professionals, and which facilitates coordination with non-Federal activities.

(c) The comprehensive plan shall allocate all of the projected functions and activities under the coordinated program among the various Federal agencies and offices that will be involved, and shall contain an affirmative statement and description of the functions to be performed and activities to be undertaken by each of such agencies and offices in carrying out the coordinated program.

(d) The comprehensive plan—

(1) shall be submitted in draft form to the Congress, and for public review, within twelve months after the date of the enactment of this Act;

(2) shall be available for public comment for a period of sixty days after its submission in draft form under paragraph (1) by means of publication in the Federal Register;

(3) shall be submitted in final form, incorporating such needed revisions as may arise from comments received during the review period, to the President and the Congress within sixty days after the close of the period allowed for comments on the draft comprehensive plan under paragraph (2); and

(4) shall constitute the basis on which each agency participating in the coordinated program requests authorizations and appropriations for nutrition monitoring and related research during the ten-year period of the program.

(e) Nothing in this section shall be construed as modifying, or as authorizing the Directorate or the comprehensive plan to modify any provision of an appropriation Act (or any other provision of law relating to the use of appropriated funds) which specifies (1) the department or agency to which funds are appropriated, or (2) the obligations of such department or agency with respect to the use of such funds.

IMPLEMENTATION OF THE COMPREHENSIVE PLAN

SEC. 104. (a) The comprehensive plan shall be carried out during the period ending with the close of the ninth fiscal year following the fiscal year in which the comprehensive plan is submitted in its final form under section 1023(d)(3), and—

(1) shall be carried out in accord with, and meet the program objectives specified in, section 103(a) and paragraphs (1) through (10) of section 103(b);

(2) shall be managed in accord with paragraphs (11) through (13) of section 103(b);

(3) shall be carried out, by the Federal agencies involved, in accord with the allocation of functions and activities under section 103(c); and

(4) shall be funded by appropriations which shall be made to such agencies (and to the Secretary of Health and Human Services) pursuant to section 107 for each fiscal year of the program, subject to annual authorizations hereafter enacted, and which shall to the maximum extent feasible be made pursuant to each such authorization for the fiscal year involved and the ensuing two fiscal years.

The Congress through its appropriate authorizing committees shall exercise continuing oversight over the coordinated program, taking into account the Directorate's annual reports and such other information and data as may be developed.

(b) Nothing is this title shall be deemed to grant any new regulatory authority or to limit, expand, or otherwise modify any regulatory authority under existing law, or to establish new criteria, standards, or requirements for regulation under existing law.

SCIENTIFIC RESEARCH AND DEVELOPMENT IN SUPPORT OF COORDINATED PROGRAM AND COMPREHENSIVE PLAN

SEC. 105. The Directorate shall provide for and coordinate the conduct, by the National Science Foundation, the National Aeronautics and Space Administration, the National Bureau of Standards, and other suitable Federal agencies, of such scientific research and development as may be necessary or appropriate in support of the

coordinated program and the comprehensive plan and in furtherance of the purpose and objectives of this Act.

EXECUTIVE DIRECTOR AND STAFF OF THE DIRECTORATE AND COUNCIL

SEC. 106. (a) The Directorate shall have an Executive Director who shall, subject to the requirements of subsection (e), be appointed by the President, by and with the advice and consent of the Senate from a list of nominees submitted by the Directorate. The Executive Director shall receive basic pay not to exceed the rate provided for grade GS–18 of the General Schedule under section 5332 of title 5, United States Code.

(b) The Dirctorate may appoint and fix the pay of such additional staff as the Directorate deems desirable.

(c) The staff of the Directorate shall be appointed subject to the provisions of title 5, United States Code, and shall be paid in accordance with the provisions of chapter 51 and subchapter II of chapter 53 of such title, relating to classification and General Schedule pay rates.

(d) The Executive Director and staff shall plan and implement the functions of the Directorate with the advise and counsel of the joint Chairpersons of the Directorate, shall serve as the focal point for the coordinated program, and shall serve as the Executive Secretary and staff for the Council.

(e) The Executive Director and technical staff shall be individuals who are eminent in the field of nutrition monitoring and related areas and shall be selected on the basis of established records of expertise and distinguished service.

AUTHORIZATION OF APPROPRIATIONS

SEC. 107. (a) For the purpose of establishing the Directorate and the Council, and for the purpose of developing the comprehensive plan under section 103, there is authorized to be appropriated to the Secretary of Health and Human Services for fiscal year 1985 the sum of $2,000,000 to remain available until expended.

(b) For the purpose of establishing and carrying out the competitive grants program under section 102(a)(4) there is authorized to be appropriated to the National Science Foundation, for the fiscal year in which the comprehensive plan is submitted in final form under section 103(d)(3) and for each of the nine succeeding fiscal years, the sum of $2,000,000 to remain available until expended.

(c) For the purpose of establishing and carrying out the grants program under section 102(a)(5) there is authorized to be appropriated to the Centers for Disease Control, for the fiscal year in which the comprehensive plan is submitted in final form under section 103(d)(3) and for each of the nine succeeding fiscal years, the sum of $1,000,000 to remain available until expended.

(d) Other authorizations and appropriations for the fiscal year in which the comprehensive plan is submitted in final form under section 103(d)(3) and for the nine succeeding fiscal years, for purposes of carrying out the coordinated program and implementing the comprehensive plan, shall be requested by the Secretary of Health and Human Services and by each of the agencies which are allocated responsibilities under the program pursuant to section 103(c), in a separate line item of the budget of the agency involved and consistent with the interagency budget for the coordinated program; and to the maximum extent feasible such appropriations shall be provided on a three-year basis, subject to annual authorization Acts hereafter enacted.

TITLE II—NATIONAL NUTRITION MONITORING ADVISORY COUNCIL

ESTABLISHMENT OF THE COUNCIL

SEC. 201. (a)(1) There is hereby established a Council to carry out the purpose of this Act, to provide scientific and technical advice on the development and implementation of the coordinated program and comprehensive plan, and to serve in an advisory capacity to the Directorate.

(2) The Council shall consist of fifteen voting members, of whom—

(A) seven members shall be appointed by the President; and

(B) eight members shall be appointed by the Congress—two by the Speaker of the House of Representatives, two by the minority leader of the House of Representatives, two by the President pro tempore of the Senate, and two by the minority leader of the Senate.

(3) The Council shall also include three ex-officio, non-voting members designated from and by the Directorate for terms not to exceed five years.

(b) The persons appointed to the Council—

(1) shall be eminent in the fields of administrative dietetics, clinical dietetics, community nutrition research, public health nutrition, nutrition monitoring and surveillance, nutritional biochemistry, food composition and nutrient analysis, health statistics management, epideminology, food technology, clinical medicine, public administration, health education, nutritional anthropology, food consumption patterns, food assistance programs, agriculture, and economics; and

(2) shall be selected solely on the basis of established records of distinguished service.

(c) The persons appointed to the Council by the President shall include—

(1) two members who are directors of nutrition research units which are primarily supported by Federal funds, and who have specialized interest in nutrition monitoring;

(2) one member who is an employee of a State government and who has a specialized interest in nutrition monitoring;

(3) one member who is an employee of a local government and who has a specialized interest in nutrition monitoring; and

(4) one member who is an appointed representative of the Food and Nutrition Board, National Academy of Sciences.

(d) The Council membership shall at all times have representatives from various geographic areas, the private sector, academia, scientific and professional societies, minority organizations, and public interest organizations.

(e) The Chairperson and Vice Chairperson of the Council shall be elected from and by the Council membership. The terms of office of the Chairperson and the Vice Chairperson shall not exceed five years. The Vice Chairperson shall perform the duties of the chairperson in the latter's absence. In case a vacancy occurs in the Chairpersonship or Vice Chairpersonship, the Council shall elect a member to fill such vacancy.

(f) The terms of office of the voting members of the Council shall be as follows:

(1) Of the seven members appointed by the President and serving at any time, one shall be appointed for a term of five years, five for terms of three years each, and one for a term of two years, as designated by the President at the time of appointment.

(2)(A) Of the two members appointed by the Speaker of the House of Representatives and serving at any time, one shall be appointed for a term of five years and one for a term of two years, as designated by the Speaker at the time of appointment.

(B) Of the two members appointed by the minority leader of the House of Representatives and serving at any time, one shall be appointed for a term of five years and one for a term of two years, as designated by the minority leader at the time of appointment.

(C) Of the two members appointed by the President pro tempore of the Senate and serving at any time, one shall be appointed for a term of five years and one for a term of two years, as designated by the President pro tempore at the time of appointment.

(D) Of the two members appointed by the minority leader of the Senate and serving at any time, one shall be appointed for a term of five years and one for a term of two years, as designated by the minority leader at the time of appointment.

Any member elected to fill a vacancy occuring prior to the expiration of the term for which his predecessor was appointed shall be elected for the remainder of such term. No members shall be eligible to serve continuously for more than two consecutive terms.

(g) The Council members shall be appointed or designated (without regard to the requirements of the Federal Advisory Committee Act) not later than ninety days after the date of the enactment of this Act.

(h) The Council shall meet no less often than once every three months at the call of the Chairperson, or upon the written request of one-third of the members. A majority of the appointed members of the Council shall constitute a quorum.

(i) Members of the Council who are not in the regular full-time employ of the United States may receive compensation when engaged in the duties of the Council at a rate fixed by the Directorate but not exceeding the daily equivalent of the rate provided for level GS-18 of the General Schedule under section 5332 of title 5, United States Code, and shall be allowed travel expenses as authorized by section 5703 of title 5, United States Code. Members of the Council who are officers or employees of the Federal Government or any State or local government shall serve without compensation but shall be allowed travel expenses as so authorized.

(j) The Executive Director and staff of the Directorate (appointed under section 106) shall serve as the Executive Secretary and staff of the Council.

FUNCTIONS OF THE COUNCIL

SEC. 202. The Council shall, in addition to any powers and functions granted to it by this Act—

(1) provide scientific and technical advice on the development and implementation of all components of the coordinated program and the comprehensive plan;

(2) evaluate the quality and effectiveness of the Directorate's fulfillment of its functions and responsibilities;

(3) evaluate the coordinated program and comprehensive plan, and the associated budget, on an annual basis and submit recommendations to the Directorate;

(4) interpret available data analysis and report on an annual basis the nutritional and related health status of the United States population and the nutritional quality of the national food supply; and

(5) submit to the Directorate an annual report which shall contain the components specified in paragraphs (2) through (4), and which shall be included in full in the Directorate's annual report to the President and the Congress as specified in section 102(c).

I. PURPOSE OF THE BILL

The principal purpose of H.R. 4684 is to establish and facilitate the timely implementation of a coordinated National Nutrition Monitoring and Related Research Program, to establish a central Federal focus for the coordination, management, and direction of Federal nutrition monitoring activities, and to bring together public and private interests in a cooperative forum.

II. COMMITTEE ACTIONS AND REPORTS

U.S. House of Representatives: Nutrition-related oversight review. Hearing before the Subcommittee on Domestic and International Scientific Planning, Analysis and Cooperation, No. 22, July 26–28 and August 2–4, 1977.

General Accounting Office: Future of the national nutrition intelligence system. Staff study CED–79–5, November 7, 1978. (Study requested by the Subcommittee on Domestic and International Scientific Planning, Analysis and Cooperation.)

U.S. House of Representatives: Nutrition surveillance and monitoring. Report prepared for the Subcommittee on Science, Research and Technology, Serial S, August 1979.

U.S. House of Representatives: Nutrition research methods and technology. Hearing before the Subcommittee on Science, Research and Technology, No. 109, September 25–27, 1979.

U.S. House of Representatives: Implementation plan for a national nutrition status monitoring system. Joint hearing before the Subcommittee on Science, Research and Technology and the Subcommittee on Department Operations, Research, and Foreign Agriculture, No. 23, June 24, 1981.

General Accounting Office: Progress made in Federal human nutrition research planning and coordination; some improvements needed. Report of the Comptroller General CED–82–56, May 21, 1982. (Study requested by the Subcommittee on Science, Research and Technology.)

U.S. House of Representatives: Federal commitment to human nutrition research. Joint hearing before the Subcommittee on Science, Research and Technology and the Subcommittee on Department Operations, Research, and Foreign Agriculture, No. 116, June 23, 1982.

U.S. House of Representatives: The role of the Federal Government in human nutrition research. Joint hearing before the Subcommittee on Science, Research and Technology and the Subcommittee on Department Operations, Research, and Foreign Agriculture, No. 35, July 14, 1982.

U.S. House of Representatives: H.R. 4684—the national nutrition monitoring and related research act of 1984. Joint hearing before the Subcommittee on Science, Research and Technology and the Subcommittee on Department Operations, Research, and Foreign Agriculture, (In press), June 20, 1984.

III. BACKGROUND AND NEED FOR THE LEGISLATION

A national nutrition monitoring system is a basic tool necessary to examine the linkages between food consumption patterns, nutritional status, and health status. A national nutrition monitoring system is essential to assure: the safety and quality of the food supply; that the nutritional needs of the public are met; and that an appropriate data base exists for planning and guiding the expenditure of public funds for agriculture, nutrition and health research, education, and intervention programs and policies. Nutrition monitoring, as defined by the HHS–USDA Joint Implementation Plan for a Comprehensive National Nutrition Monitoring System (NNMS) is "that set of activities which are necessary to provide regular information about the role and status of factors which bear on the contribution that nutrition makes to the health of American people."

History of nutrition monitoring in the United States

The American public and national policymakers have focused attention on the role of nutrition in public health promotion and status since the 1930's. Concerns about the nutritional well-being of the United States population escalated in the 1960's and again in the early 1980's as indications of hunger and nutrition problems in certain age, income, and geographic groups mounted. Federal responses to these concerns have been initiated by the Congress of the United States, the President of the United States, and the Executive Branch. Examples of these initiatives to obtain objective data on the dietary and nutritional status of the population include:

Nationwide Food Consumption Survey (NFCS), 1936.—The United States Department of Agriculture (USDA) conducted the first large-scale national household food consumption survey. Additional surveys were conducted in 1942, 1948, 1955, 1965–1966, and 1977–1980.

Ten-State Nutrition Survey (TSNS), 1967.—Public Law 90–174 directed the Secretary of Health, Education and Welfare (HEW) to conduct a survey of the incidence and location of serious hunger and malnutrition and health problems. The survey was conducted between 1968 and 1970 in ten states.

National Nutrition Surveillance Survey (NNSS), 1969.—President Nixon directed the Secretary of HEW to expand existing surveys (authorized by the National Health Survey Act of 1956, P.L. 84-652) to provide a detailed description of the extent of hunger and malnutrition. The objectives of the National Nutrition Surveillance Survey were added to the Health Examination Survey which resulted in the National Health and Nutrition Examination Survey.

National Health and Nutrition Examination Survey (NHANES), 1976.—HEW (now the Department of Health and Human Services) conducted NHANES I from 1971-1974 and NHANES II from 1976-1980. The Hispanic Health and Nutrition Examination Survey (HHANES) was conducted from 1982-1984.

Nutritional Status Monitoring System (NSMS), 1977.—P.L. 95-113 directed the Secretaries of USDA and HEW to submit to Congress a proposal for a comprehensive nutritional status monitoring system. At the request of Congress, the 1978 proposal was developed into the HHS-USDA Joint Implementation Plan for a Comprehensive National Nutrition Monitoring System (NNMS) submitted to Congress in 1981.

A detailed history and description of nutrition monitoring activities in the United States are included in:

Brown, G.E. Jr.: National Nutrition Monitoring System: A Congressional Perspective. Journal of the American Dietetic Association, Vol. 84, No. 10, October 1984.

Ostenso, G.L.: National Nutrition Monitoring System: A Historical Perspective. Journal of the American Dietetic Association, Vol. 84, No. 10, October 1984.

Panel of the National Academy of Public Administration: Improving the National Health and Nutrition Examination Survey. Washington, DC: National Academy of Public Administration, 1980.

U.S. House of Representatives: Nutrition Surveillance and Monitoring. Report prepared for the Subcommittee on Science, Research and Technology of the Committee on Science and Technology, Serial S, August 1979.

Use of nutrition monitoring data

The major components of the current national nutrition monitoring system are the Nationwide Food Consumption Survey (NFCS) and the National Health and Nutrition Examination Survey (NHANES). The 1984 National Academy of Science report, *National Survey Data on Food Consumption: Uses and Recommendations*, identified current and potential uses of the dietary data resulting from these surveys.

The range of dietary data uses was found to go far beyond traditional food and nutrition related issues. For example, data are used in addressing questions related to agricultural production of food and fiber, as well as economic demand analyses and socioeconomic analyses of consumption. Data are also used to appraise the history and trends in food consumption patterns and the nutrient contribution of foods available in the marketplace.

Food safety and toxicology policies and considerations related to incidental contaminants, food additives, and naturally occurring toxic substances also depend on dietary survey data. In addition,

these data are used as a basis for the design and marketing of new or improved food products, setting nutrition research and education priorities, and developing food and nutrition-related policies for food regulations and programs. Dietary data in conjunction with nutritional status data are imperative for the assessment of interrelationships of health and nutrition variables in population groups.

In a broader context, nutrition monitoring data are useful indicators of the social well-being of populations and are a necessary component of agriculture, nutrition and health policy and planning. The data have a wide variety of uses and users, representing all sectors of society. Systems which contribute to and benefit from nutrition monitoring data such as food production, health care, and Federal intervention systems are national in scope. Thus, there is general agreement that a comprehensive nutrition monitoring program must be a Federal responsibility.

Current national nutrition monitoring system

The HHS–USDA Joint Implementation Plan for a Comprehensive National Nutrition Monitoring System (NNMS) submitted to Congress in September 1981 outlines the Federal intent through fiscal year 1987. The major components of the National Nutrition Monitoring System are the NFCS and NHANES. Examples of additional activities which contribute to the understanding of nutritional status include the Total Data Diet Study conducted by the HHS's Food and Drug Administration and the Nutrient Data Bank administered by USDA's Human Nutrition Information Services.

The plan includes a calendar of events for the critical features of the implementation activities. These activities are categorized under the following rubrics: Health status measurements, food consumption measurements, food composition measurements, dietary knowledge and attitudes, food supply determinations, and research.

For each of these categories, the plan outlines current efforts and implementation activities, including deficiencies noted in 1978, progress, and activities deferred. The major outcome of the plan is to conduct, in fiscal year 1987, the first coordinated NFCS–NHANES based on a compatible and interlocking survey design.

The plan's calendar of events gives a timetable for NFCS and NHANES activities only. The plan does not indicate that the coordinated survey to be initiated in 1987 would be designed as a continuous annual sampling, data processing and reporting system. Mechanisms for incorporating other activities such as HHS's Centers for Disease Control nutrition surveillance program, providing technical assistance to state and local governments, establishing national baseline data, and research to develop uniform indicators, standards, and procedures for nutrition monitoring are not included in the plan. The plan does not identify coordination approaches, activities or needs of other Federal agencies, lead agency responsibility, or manpower and economic resources needed to complete the specified critical features by 1987.

Witnesses testifying at the June 20, 1984 hearing on H.R. 4684 assessed the adequacy of current activities and progress in implementing the 1981 plan as follows:

Presently the need for a comprehensive nutrition monitoring system is not being met even though many of the elements of the system exist.

The original plans for a comprehensive nutrition monitoring system were first proposed in 1978 and developed in more detail in 1981 by USDA and DHHS. In spite of the more than six years since the inception of the idea, there is little progress in evidence and, in fact, plans for the first steps in integration of HANES and NFCS have been delayed.

Presently the data obtained from these various sources are not integrated to provide the timely and comprehensive view of food practices, trends and health implications that could be constructed from the comprehensive data collected by the surveys cited. This should be a major function of a national nutrition monitoring system. In most instances, agencies have not had sufficient resources to insure timely analysis and release of national survey data. These resources should also be provided so that the research and academic community in the United States could play its complementary role in analysis and interpretation of national survey results.

Furthermore, the different survey and analysis methods employed by HHS and USDA do not allow the user to compare findings of HANES I (1971–74) with NFCS (1977–78) or with HANES II (1976–80). Without this comparability, how do we know if we are making progress?

There is little practically-oriented epidemiologic research to develop shorter and cheaper methods of monitoring nutritional status, food consumption, nutrition knowledge, and food scarcity suitable for use by states, localities, and others needing such methods.

In addition, a coordinated effort among the various agencies would enhance standardization of data collection, analysis and reporting, thereby facilitating comparison and interpretation of the surveys and also providing a more comprehensive picture of the nutritional status of the population.

Currently most information we have is 6–10 years old, and therefore is not very useful in identifying current problems, such as the increasing incidence of hunger and malnutrition resulting from the strains of the recent economic recession and cutbacks in Federal food assistance programs.

Nutrition surveys must be continuous, and they must be accountable to policymakers and the public. Even the President's Task Force on Food Assistance make this point. Yet the current system does not ensure continuity or accountability.

The testimony of public witnesses quoted above represented over 50 organizations or coalitions of scientific societies, state and local governments, health, and service organizations, consumer, anti-hunger, senior, and religious groups, and food producers and proc-

essors. These coalitions expressed the view that the current national nutrition monitoring system needed improvement, continuity in implementation and funding was imperative, and a Congressional mandate was necessary to ensure increased progress and Federal commitment. However, Administration witnesses indicated significant progress had been made in implementing the National Nutrition Monitoring System and a commitment to monitoring was exemplified by its implementation of the plan submitted to Congress in 1981.

Legislative need to improve the national nutrition monitoring systems

Over the past six years, the Subcommittee on Science, Research and Technology of the Committee on Science and Technology and the Subcommittee on Department Operations, Research, and Foreign Agriculture of the Committee on Agriculture have attempted to motivate HHS and USDA to develop a central focus for the coordination of Federal nutrition to develop a central focus for the coordination of Federal nutrition monitoring activities. The Subcommittee also encouraged these departments to establish a means for other Federal agencies and the public and private sector to participate in the planning and implementation of the NNMS. In addition, the Subcommittees requested from the Administration an estimate of the resources needed to complete the 1981 plan and emphasized the need for a continuous and timely system for assessing the nutritional status of the population.

In response to these requests the Administration had underscored their commitment to nutrition monitoring. However, neither the information requested nor an assessment of the recommended improvements have been received. Although progress has been made since the 1981 plan was submitted to Congress, current actions indicate that the first coordinated survey to be conducted in 1987 is in jeopardy, plans for a continuous and timely system are not developed and important components of a comprehensive national nutrition monitoring system which would enhance the utility and cost-effectiveness of such a system are not included in the current plan and have received inadequate attention and resources.

Based on findings of the Committee, a legislative mandate is recommended as necessary to ensure that the United States has the benefit of a continuous and comprehensive national nutrition monitoring system. The Committee believes that H.R. 4684, as amended, adequately addresses the needs expressed by the groups who depend upon the products and services of a nutrition monitoring system. In addition, H.R. 4684 calls for the authorization and appropriation of funds for nutrition monitoring to be identified as a separate line item of the budget of the appropriate agency, thus giving the Congress and the public the opportunity to exercise their oversight responsibilities to assure the National Nutrition Monitoring and Related Research Program is effectively administered.

IV. EXPLANATION OF THE BILL

A national nutrition monitoring system is essential to the development of rational food, nutrition, and health policies at all levels of government. As early as 1969, the White House Conference on Food, Nutrition and Health recommended the implementation of a comprehensive national nutrition monitoring system. In 1977, the Congress directed USDA and HEW to develop a proposal for a comprehensive nutritional status monitoring system. The 1978 proposal was developed into the implementation plan submitted to Congress in 1981. The need to improve and expand current Federal efforts in nutrition monitoring has recently been expressed by all sectors of society, including the 1984 report of the President's Task Force on Food Assistance.

Over the past six years, oversight hearings by the Subcommittee on Science, Research and Technology of the Committee on Science and Technology and the Subcommittee on Department Operations, Research, and Foreign Agriculture of the Committee on Agriculture have revealed that:

Scientific methods and technologies to assess nutrition and dietary status are costly, imprecise, and lack standardization;

Federal efforts to collect, analyze, interpret, and disseminate dietary and nutritional status data are untimely, give inadequate attention to assessing high-risk groups and geographic areas, and lack resources for the continuous collection, processing, and analysis of dietary, nutritional, and related health status information and for the monitoring of general health trends and their relationship to food practices and supplies;

Nutrition monitoring and related research lacks a central Federal focus for the development, coordination, and implementation of a strategic and timely national nutrition monitoring program; and

No effective means currently exist to assist State and local governments in obtaining dietary and nutritional status and in developing related data bases and networks, or to bring together public and private interests to identify national nutrition monitoring priorities and issues, and to promote progress in a cooperative forum.

The principal objective of H.R. 4684 is to establish a ten-year coordinated National Nutrition Monitoring and Related Research Program through the development of a comprehensive plan to identify priorities and responsibilities, and to be used as a basis for authorization and appropriation of resources. The purposes of the bill are:

To establish and facilitate the timely implementation of a coordinated National Nutrition Monitoring and Related Research Program and thereby establish a scientific basis for the maintenance and improvement of the nutritional status of the United States population and the nutritional quality of the United States food supply;

To establish and implement a comprehensive National Nutrition Monitoring and Related Research Plan to assess on a continuing basis the dietary and nutritional status and trends of the United States population, the state-of-the-art, future

monitoring and related research priorities, and the relevant policy implications of the findings;

To establish and improve national nutritional and health status data and related data bases and networks, and to support research necessary to develop uniform indicators, standards, methodologies, technologies, and procedures for nutrition monitoring;

To establish a central Federal focus for the coordination, management, and direction of Federal nutrition monitoring activities;

To establish mechanisms for addressing the nutrition monitoring needs of Federal, State, and local governments, the private sector, scientific and engineering communities, health professionals, and the public in support of the objectives described above.

To provide for the conduct of such scientific research and development as may be necessary or appropriate in support of such objectives.

H.R. 4684 establishes a framework for achieving the stated objectives through the establishment of a Directorate, Advisory Council, and Executive Director.

The Directorate is jointly chaired by the Secretaries of Agriculture, Health and Human Services, and Defense. Six additional Federal agencies which have responsibility for nutrition monitoring and related research are designated as members of the Directorate. The major function of the Directorate is to establish a central Federal focus for the coordination and implementation of all Federal nutrition monitoring activities, consistent with the needs of the users of the information and the essential products of a national nutrition monitoring system.

The Advisory Council is composed of fifteen members, seven to be appointed by the President, four by the House and four by the Senate. The Council members are to be eminent in nutrition monitoring and related areas. The membership is also to include representation from state and local governments, the Food and Nutrition Board of the National Academy of Sciences, various geographic areas, the private sector, academia, scientific and professional societies, minority organizations, and public interest organizations. Three members representing the Directorate are to be designated by the Directorate as non-voting members of the Council.

The Council is to serve as a communication link between the appointed members, the scientific and user communities, and the Federal government. The major functions of the Council are to provide scientific and technical advice on the development and implementation of the National Nutrition Monitoring and Related Research Program, evaluate the effectiveness of the Directorate's implementation of the Program, and report on an annual basis the nutritional and related health status of the United States population and the nutritional quality of the food supply.

The Executive Director is to be appointed by the President. The major functions of the Executive Director and staff are to serve as the support staff for the Directorate and the Council and as the focal point for the Program.

The bill authorizes appropriations of $2.0 million for fiscal year 1985 to establish the Directorate and the Council, and to develop the Comprehensive Plan. Provisions are included to authorize for each fiscal year of the Program a $2.0 million competitive grants program to stimulate nutrition monitoring methods research and a $1.0 million grants program to assist state and local governments in developing the capacity to conduct nutrition monitoring activities.

V. SECTIONAL ANALYSIS OF THE BILL, AS AMENDED

Title I—Nutrition Monitoring and Related Research

Section 101 establishes a ten-year coordinated Nutrition Monitoring and Related Research Program. To implement the coordinated program a Directorate for Nutrition Monitoring and Related Research is established to be jointly chaired by the Secretary of Agriculture, the Secretary of Health and Human Services, and the Secretary of Defense. One representative each from the Environmental Protection Agency, the National Bureau of Standards, the Bureau of Labor Statistics, the Agency for International Development, the Veteran's Administration, and the National Science Foundation are designated as members of the Directorate, as well as any additional representatives of Federal agencies which the joint Chairpersons consider appropriate. The Directorate is responsible for defining and directing the organization and management of the Directorate and the Advisory Council.

The Committee on Science and Technology removed from the Directorate the specific designation of Federal agencies which are components of the departments designated as Chairpersons of the Directorate. The Committee also eliminated the positions of Chairperson and Vice Chairperson of the Advisory Council from membership in the Directorate. The establishment of a management consortium for the Directorate was deleted. These changes were made to increase the flexibility of the organizational structure of the Directorate.

Section 102 defines the functions of the Directorate and authorizes the Directorate to establish the goals of the coordinated program, identify the activities required to meet the goals, identify the responsible agencies, and assure the timely implementation of the coordinated Program and the Comprehensive National Nutrition Monitoring and Related Research Plan. The Directorate is to give priority to two grants programs: (1) to be administered by the National Science Foundation, to accelerate the development of uniform and cost-effective standards and indicators for the assessment and monitoring of nutritional and dietary status and for relating food consumption patterns to nutritional and health status; and (2) to be administered by the Centers for Disease Control, to encourage and assist State and local governments in developing the capacity to conduct monitoring and surveillance of nutritional status, food consumption, and nutrition knowledge and to use such capacity to enhance nutrition services. The Directorate is to develop an annual interagency budget for each fiscal year of the coordinated Program and submit an annual report to the President and the Congress by January 15 of each year.

The Committee on Science and Technology added the grants program to assist State and local governments based on recommendations of witnesses representing State and local governments, public health, and other coalitions.

Section 103 specifies that the Directorate shall develop a Comprehensive National Nutrition Monitoring and Related Research Plan. The Comprehensive Plan is to serve as a guide for coordinating nutrition monitoring activities, identifying priorities, defining the role of the Federal government in addressing the priorities, allocating responsibility to Federal agencies, developing an interagency budget for the coordinated program, and requesting authorizations appropriations for implementation of the Plan. The Comprehensive Plan is to be submitted in draft form to the Congress, and for public review, within twelve months after the date of enactment of the act. The final Comprehensive Plan is to be submitted to the President and the Congress within sixty days after the close of the comment period.

The Committee on Science and Technology added language to assess, analyze and report, on a continuous basis, for a representative sample of the low income population, food and household expenditures, participation in food assistance programs, and periods experience when resources were not sufficient to provide an adequate diet. Specification of the time that continuous collection and analysis of nutritional and dietary status data of a sample of the United States population is to be initiated was deleted. Language was added to ensure methods and techniques developed for the assessment of nutritional and dietary status and trends addressed the needs of States and localities. The time allocated for the development of the draft Comprehensive Plan was increased to twelve months and the time for submission of the final Comprehensive Plan was increased to sixty days following the comment period. The mechanism for making the draft Comprehensive Plan available for public comment was identified as the *Federal Register*.

Section 104 specifies that the Comprehensive Plan is to be implemented during the period ending with the close of the ninth fiscal year following the fiscal year in which the Comprehensive Plan is submitted in final form. The Federal agencies allocated the functions and activities encompassed in the Comprehensive Plan are to be funded by appropriations to each responsible agency, subject to annual authorizations, and to the extent feasible, for the fiscal year involved and the ensuing two fiscal years.

Section 105 authorizes the Directorate to coordinate with other appropriate Federal agencies scientific research and development in support of the objectives of the coordinated Program and Comprehensive Plan.

Section 106 establishes an Executive Director, and staff as appropriate, to plan and implement the functions of the Directorate with the advice and counsel of the joint Chairpersons of the Directorate. The Executive Director is to be appointed by the President.

The Committee on Science and Technology added language to clarify that the appointment of the Executive Director by the President was to be with the advice and consent of the Senate from a list of nominees submitted by the Directorate. The Committee also specified that the Executive Director and technical staff

should be individuals eminent in the field of nutrition monitoring and related areas, and selected on the basis of established records of expertise and distinguished service.

Section 107 authorizes $2.0 million for fiscal year 1985 to the Secretary of Health and Human Services to establish the Directorate and convene the Advisory Council for purposes of developing the Comprehensive Plan. The competitive grants program to be administered by the National Science Foundation is authorized $2.0 million for the fiscal year in which the Comprehensive Plan is submitted in final form and for each of the nine succeeding fiscal years. The grants program to be administered by the Centers for Disease Control is authorized $1.0 million for the fiscal year in which the Comprehensive Plan is submitted in final form and for each of the nine succeeding fiscal years.

Title II—National Nutrition Monitoring Advisory Council

Section 201 establishes an Advisory Council to provide scientific and technical advice on the development and implementation of the coordinated Program and Comprehensive Plan, and to serve in an advisory capacity to the Directorate. The Council is to include fifteen voting members, seven members to be appointed by the President, and eight members to be appointed by the Congress. The persons appointed to the Council are to be eminent in nutrition monitoring and related fields and selected solely on the basis of established records of distinguished service. The Council is to include representatives from various geographic areas, the private sector, academia, scientific and professional societies, minority organizations, and public interest groups. The terms of office of the voting members of the Council are staggered and members of the Council who are not full-time Federal employees may receive compensation for service on the Council, not to exceed the daily equivalent of the GS–18 level.

The Committee on Science and Technology added language to designate three members of the Directorate as ex-officio, non-voting members of the Advisory Council. The provision to appoint Federal employees to the Advisory Council was deleted. The Committee also modified the language to specify that the Chairperson and Vice Chairperson of the Council should be elected from and by the Council membership.

Section 202 defines the functions of the Council, which include the evaluation of the quality and effectiveness of: the Directorate's fulfillment of its functions and responsibilities; the coordinated Program and Comprehensive Plan; and the associated budget. The Council is also to interpret available data analyses and report on an annual basis the nutritional related health status of the United States population and the nutritional quality of the national food supply. The Council is to submit to the Directorate an annual report to be included in full in the Directorate's annual report to the President and the Congress.

VI. COMMITTEE VIEWS—DIRECTORATE FOR NUTRITION MONITORING AND RELATED RESEARCH

Functions

The primary functions of the Directorate for Nutrition Monitoring and Related Research are to develop, implement, and manage a coordinated strategic and timely National Nutrition Monitoring and Related Research Program. The Committee intends that the Directorate will establish a central focus for coordinating Federal nutrition monitoring activities, bringing together public and private interests and priorities, and disseminating the results of the Program in a cooperative forum.

Administration

The Committee intends the Directorate to be an independent task force and that the Directorate should not be under the supervision or control of any other Federal agency or entity. The Directorate is expected to define and direct the organization and management of the Directorate and the Advisory Council. The Assistant Secretary for Health, Department of Health and Human Services, is to serve as the administrator of the coordinated National Nutrition Monitoring and Related Research Program for purposes of the authorization and appropriation of funds to provide administrative support services such as payroll, personnel management, office space and equipment, etc., required by the office of the Executive Director and the functions of the Advisory Council.

The Committee does not believe the Executive Director and staff necessarily need to be physically located in any one Federal agency. Location of the Executive Director in close proximity to one or more of the Departments comprising the Chairpersons of the Directorate could facilitate communication. However, the Department and agency members of the Directorate are not currently located in one central or geographic area, therefore consideration should be given to housing the office of the Executive Director near the offices of other Federal coordination task forces, such as the Interagency Task Force on Acid Precipitation. In this regard, the Committee believes considerable benefits could be realized from other Federal coordination task forces through shared experiences in developing interagency comprehensive plans and budgets, and in managing the functions of interagency task forces and advisory groups.

The Committee intends that the Directorate will provide the Advisory Council with necessary data resources and adequate staff support to ensure that the functions of the Council are achieved. Section 107(a) provides $2.0 million start-up funds to establish the Directorate and the Council, and to develop the Comprehensive Plan for National Nutrition Monitoring and Related Research. For future years, the Directorate is expected to include budget requirements for administrative support services, the Executive Director and staff, and the Council in the Comprehensive Plan. The Directorate is expected to request funds for these purposes for the fiscal year in which the Comprehensive Plan is submitted and each succeeding fiscal year, consistent with the interagency budget for the

coordinated National Nutrition Monitoring and Related Research Program.

NATIONAL NUTRITION MONITORING ADVISORY COUNCIL

Functions

The National Nutrition Monitoring Advisory Council is intended to represent the views and recommendations of a broad range of experts, and to serve as a communication link among the public and private sectors, the Directorate, the President, and the Congress. The Committee wishes to emphasize that one of the Advisory Council's functions is to include in their annual report an interpretation of available data on the nutritional and related health status of the United States population, the nutritional quality of the national food supply and relevant policy implications of the findings. The Advisory Council's functions of data interpretation and policy implication are to be independent and separate from the Directorate's function to assure the timely collection, analysis, and reporting of nutrition monitoring data.

In addition to providing sceintific and technical advice on the components of the coordinated Program and the Comprehensive Plan, the Advisory Council should give high priority to the evaluation of the adequacy and effectiveness of the coordinated Program and associated budget, as well as the Directorate's fulfillment of its functions. Thus, the Committee emphasizes the importance of selecting Advisory Council members who have both the necessary expertise and time to devote to the functions of the Council. In this regard, the Committee supports the provision that Advisory Council members may receive compensation when performing Council functions.

COMPREHENSIVE PLAN FOR NATIONAL NUTRITION MONITORING AND RELATED RESEARCH

Scope

The Committee expects that the Comprehensive Plan for National Nutrition Monitoring and Related Research will encompass all aspects of nutrition monitoring including the research necessary to improve the benefits and cost-effectiveness of the National Nutrition Monitoring and Related Research Program. The Comprehensive Plan should focus on the infrastructure necessary to support an effective nutrition monitoring system (methods and technologies, data banks and networks, technical assistance to state and local governments, and data needs of all sectors of society), as well as the surveys necessary to assess and report on a continuous basis the nutritional and dietary status of the United States population and the nutritional quality of the United States food supply. Special attention should be given to examining the interrelationships between food consumption patterns, nutritional status, and health status.

The Comprehensive Plan is to serve as a focal point for nutrition monitoring activities and identification of national nutrition monitoring priorities. The Committee intends that the Comprehensive Plan will be a rolling ten-year plan, up-dated and adjusted as nec-

essary on a systematic basis, with long-term priorities added as short-term goals are completed and Program progress evaluated.

The Committee intends that the Comprehensive Plan will include the full range of national nutrition monitoring needs and priorities, including the identification of those priorities to be initiated by the Federal government and identification of the responsible agencies. The Committee expects the Comprehensive Plan to assist the non-federal research communities in selecting those activities which they can undertake to achieve the national goals. To this end, the Directorate should establish mechanisms to stimulate academic/industry/government partnerships to assist in accomplishing the objectives of the Comprehensive Plan.

The Committee notes that several reports, including the recent President's Task Force on Food Assistance, have called for a timely and continuous nutrition monitoring system. An annual continuous data collection, processing and reporting system for nutrition monitoring was also a strong recommendation of the National Academy of Sciences (NAS) 1981 report, *Assessing Changing Food Consumption Patterns,* and the 1984 NAS report, *National Survey Data on Food Consumption: Uses and Recommendations.* The Committee is concerned that the 1981 NAS recommendations have not prompted the development of a continuous survey design for the proposed 1987 coordinated NFCS–NHANES.

Thus, the Committee intends that the Comprehensive Plan will include a system, to begin no later than FY 1990, for data collection, and assessment and reporting of nutritional and dietary status on an annual basis, as appropriate, and a comprehensive data analysis every five years. Such a system should be designed to provide data from a national sample, as well as high-risk groups and geopolitical and geographic areas. The initiation of a continuous data collection and reporting system in FY 1990 would provide for planning, methods research, and use of the knowledge and experience gained through the 1987 NFCS–NHANES coordinated survey proposed in the HHS–USDA Joint Implementation Plan for a Comprehensive National Nutrition Monitoring System, submitted to the Congress in 1981.

The Committee directs the Directorate to give special consideration to the characteristics of the proposed continuous system which is described in the 1981 NAS report, *Assessing Changing Food Consumption Patterns.* Likewise, attention should be given to the 1984 NAS report, *National Survey Data on Food Consumption: Uses and Recommendations,* which calls for identical methodologic cores, compatible sampling, common population descriptors, a continuous data collection, processing, and reporting system, and a continuous evaluation process for updating of the survey design and methods.

Based on testimony before the Subcommittee on Science, Research and Technology of the Committee on Science and Technology and the Subcommittee on Department Operations, Research, and Foreign Agriculture of the Committee on Agriculture over the past six years, the Committee believes special attention should be given to the grants programs which address the following priorities: (1) research to accelerate the development of uniform and cost-effective standards and indicators for the assessment and mon-

itoring of nutritional and dietary status and for relating food consumption patterns to nutritional and health status; and (2) technical assistance to state and local governments to enhance their capacity to conduct monitoring and surveillance of nutritional status and to use the knowledge gained to improve nutrition services. The Committee intends these two grants programs to be an integral part of the Comprehensive Plan and does not intend that these research and technical assistance priorities should be limited to or addressed by the grants programs alone.

VII. LEGISLATIVE HISTORY

Hearings on national nutritional status monitoring priorities and systems have been held by Subcommittees of the Committee on Science and Technology since 1977, (see Section II of this report). The 1977 hearings prompted a mandate in P.L. 95–113, the Food and Agriculture Act of 1977, for USDA and HEW (now the Department of Health and Human Services) to submit a proposal for a comprehensive nutritional status monitoring system. The proposal was submitted to Congress in March 1978. A Subcommittee of the Science and Technology Committee requested the General Accounting Office (GAO) to review the proposal.

In June 1978 GAO identified several weaknesses in the proposal and recommended the Executive Branch develop an implementation plan. Both the House and the Senate directed the Executive Branch to proceed with an implementation plan for a national nutritional status monitoring system.

The implementation plan had not been received by Congress in 1981. Therefore, joint hearings were held in June 1981 by the Subcommittee on Science, Research and Technology of the Committee on Science and Technology and the Subcommittee on Department Operations, Research, and Foreign Agriculture of the Committee on Agriculture to obtain from the Executive Branch a commitment for submission of the implementation plan. The HHS–USDA Joint Implementation Plan for a Comprehensive National Nutrition Monitoring System was received by the Congress in September 1981. The Subcommittees held joint oversight hearings in 1982 and 1983. Results of these hearings indicated: the implementation plan focused primarily on the Nationwide Food Consumption Survey (NFCS) and the National Health and Nutrition Examination Survey (NHANES); the timeliness of data analysis and coordination had improved, but remained inadequate; limited attention was given to the research infrastructure to enhance the effectiveness of nutrition monitoring; and a survey design had not been developed to provide for an annual continuous monitoring system.

During the 1983 hearing, public witnesses recommended that an effective nutrition monitoring system was extremely important to the development of nutrition, agriculture, and health policies in the United States, and that a legislative mandate would assist in establishing a central focus and identifiable resources for Federal nutrition monitoring activities. In response to the nutrition monitoring needs expressed at this oversight hearing, Congressmen Buddy MacKay (D–FL), George E. Brown, Jr. (D–CA), and Doug

Walgren (D–PA), introduced H.R. 4684, The National Nutrition Monitoring and Related Research Act of 1984, on January 30, 1984.

H.R. 4684 was referred jointly to the Committee on Agriculture and the Committee on Science and Technology. The Subcommittee on Science, Research and Technology of the Committee on Science and Technology and the Subcommittee on Department Operations, Research, and Foreign Agriculture of the Committee on Agriculture held joint hearings on the bill on June 20, 1984. The Subcommittee on Science, Research and Technology met on July 25, 1984, adopted an amendment in the nature of a substitute and ordered the bill reported to the Committee on Science and Technology. The bill was further amended by the Full Committee on August 8, 1984. On September 20, 1984, the Committee favorably reported the bill by roll call vote (26–13) of those present.

VIII. IMPACT ON INFLATION

In accordance with Rule XI, Clause 2(l)(4), of the Rules of the House of Representatives, this legislation is assessed to have no adverse inflationary effect on prices and costs in the operation of the national economy.

IX. COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

Pursuant to Rule XI, Clause 2(l)(3) of the Rules of the House of Representatives, under the authority of Rules X, Clause 2(b)(1) and Clause 3(f), the Committee's oversight findings and conclusions are reflected in the recommendations found in the present bill and report.

X. SUMMARY OF GOVERNMENT OPERATIONS COMMITTEE FINDINGS AND RECOMMENDATIONS

No findings and recommendations on oversight activity pursuant to Rule X, Clause 2(b)(2) and Rule XI, Clause 2(l)(3), of the Rules of the House of Representatives, have been submitted by the Committee on Government Operations for inclusion in this report.

XI. BUDGET ANALYSIS AND PROJECTION

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, September 21, 1984.

Hon. DON FUQUA,
Chairman, Committee on Science and Technology,
U.S. House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has reviewed H.R. 4684, the National Nutrition Monitoring and Related Research Act of 1984, as ordered reported by the House Committee on Science and Technology on September 20, 1984.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

ERIC HANUSHEK
(For Rudolph G. Penner).

XII. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: H.R. 4684.

2. Bill title: National Nutritional Monitoring and Related Research Act of 1984.

3. Bill status: As ordered reported by the House Committee on Science and Technology on September 20, 1984.

4. Bill purpose: This bill would establish a coordinated National Nutritional Monitoring and Related Research Program. It would also establish a comprehensive plan for the assessment and maintenance of the nutritional and dietary status of the United States population and the nutritional quality of the United States food supply. The bill would provide for the conduct of scientific research and development in support of such program and plan.

5. Estimated cost to the Federal Government:

[By fiscal year, in millions of dollars]

	1985	1986	1987	1988	1989
Authorization level:					
Establish Directorate and Council and Develop the National Nutrition Monitoring and Related Research Plan	2.0				
Competitive Grants Program, National Science Foundation	2.0	2.0	2.0	2.0	2.0
Grants Program, Centers for Disease Control	1.0	1.0	1.0	1.0	1.0
Total authorization level	5.0	3.0	3.0	3.0	3.0
Estimated outlays:					
Establish Directorate and Council and Develop the National Nutrition Monitoring and Related Research Plan	2.0				
Competitive Grants Program, National Science Foundation	1.0	2.0	2.0	2.0	2.0
Grants Program, Centers for Disease Control	0.8	1.0	1.0	1.0	1.0
Total estimated outlays	3.8	3.0	3.0	3.0	3.0

The costs of this bill fall within budget functions 250 and 550.

Basis of estimate

All authorization levels are stated in the bill. The authorized amount is assumed to be fully appropriated at the beginning of each fiscal year. Outlays are estimated using spendout rates computed by CBO on the basis of recent program data.

H.R. 4684 specifically authorizes for fiscal year 1985 the development of the Comprehensive National Nutrition Monitoring and Related Research Plan outlined in the bill. The costs of implementing the plan are not included in this estimate as they are not authorized in the bill. If future authorizations and appropriations are provided, the total cost for the National Nutritional Monitoring Plan could be substantially higher than the cost shown in this estimate. We have shown authorizations throughout our five year projection period for both of the grant programs established in this bill. However, both programs have nine year specific authorizations in each fiscal year.

6. Estimated cost to State and local governments: The budgets of state and local governments would not be greatly affected by the enactment of this bill.

The bill would establish a competitive grants program to be administered by the National Science Foundation to encourage nutritional research by federal and non-federal entities on an appropriate matching funds basis. However, the matching requirements are not specifically stated in the bill. Costs to state or local governments would depend on the extent to which they contributed to the non-federal entity share of the required matching funds.

7. Estimate comparison: None.

8. Previous CBO estimate: None.

9. Estimate prepared by: Carmela Pena.

10. Estimate approved by: C. G. Nuckols, for James L. Blum, Assistant Director for Budget Analysis.

XIII. COMMITTEE RECOMMENDATIONS

A quorum being present on September 20, 1984, the Committee ordered favorably reported the bill, H.R. 4684, by a roll call vote (26–13) of those present.

XIV. ADDITIONAL VIEWS OF HON. LARRY WINN, JR. AND HON. JUDD GREGG ON H.R. 4684

THE NATIONAL NUTRITION MONITORING AND RELATED RESEARCH ACT OF 1984

We strongly oppose the passage and enactment of H.R. 4684, the National Nutritional Monitoring and Related Research Act of 1984. While one purpose of the bill is to facilitate timely implementation of a coordinated monitoring program and to proceed with assorted ancillary programs, a legislative mandate is unnecessary to achieve this end.

On January 18, 1984, President Reagan's Task Force on Food Assistance adopted their report, including several recommendations. "We believe that the overall effort—the impressive set of federal, state, local and private programs—is basically sound" stated the Task Force. The Task Force recommended continued broad federal assistance and stated that food assistance programs had not been substantially reduced. In addition, special programs such as women, infants and children (WIC) have increased, while commodity assistance to private organizations has also gone up.

The Task Force made recommendations which, in their determination, legislation could properly addresses. However those areas are not what H.R. 4684 addresses. Rather, the Task Force recommendations' were to address creation of autonomous state programs and to expand eligibility to federal programs, two functions which clearly are beyond the scope of this legislation.

With regard to the operation and coordination of ongoing federal programs the Task Force noted that such efforts could be accomplished within the present federal structure. We have made this case and have emphasized the fact that rather than authorizing new spending, on the order of $30 million for this legislation, that Congress look favorably on funding requirements for conducting the National Health and Nutrition Examination Survey (NHANES) and Nationwide Food Consumption Survey (NFCS) concurrently, since this proposed plan is undergoing the strain of fiscal constraint.

With regard to establishment of grants within the National Science Foundation (NSF), we strongly oppose the use of NSF for administering a competitive grants program to "accelerate the development of uniform and cost-effective (nutritions and dietary) standards and indicators." This would be a new program for the NSF agenda, in an area where at least two other major federal agencies have jurisdiction and responsibility. It also is an area where implementation of this function may very well require more than the sums authorized to put this function into operation. Additionally, we point out, once again, the consequence of tampering with the research agenda of the Foundation, which the national scientific

community very carefully advises and reviews. We are reminded of the last two years, where special Congressional action to increase funding for new efforts has jeopardized research funds for long term, peer-reviewed research projects. Those new initiatives are still struggling to get off the ground and other programs thus have suffered. We see the responsibility set forth in H.R. 4684 not only as an inappropriate role for NSF but one that competes for funding of appropriate roles for the Foundation.

With regard to any functions within this bill for which other Committees have jurisdiction, we support the review of this legislation by those Committees.

LARRY WINN, Jr.
JUDD GREGG.

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98TH CONGRESS
2d Session
HOUSE OF REPRESENTATIVES
REPORT
98-1078

MANUFACTURING SCIENCES AND ROBOTICS RESEARCH AND DEVELOPMENT ACT OF 1984

SEPTEMBER 25, 1984.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. FUQUA, from the Committee on Science and Technology, submitted the following

REPORT

together with

ADDITIONAL VIEWS

[To accompany S. 1286]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science and Technology, to whom was referred the bill (S. 1286) to establish a program to conduct research and development for improved manufacturing technologies, and for other purposes, having considered the same, report favorably thereon with amendments and recommend that the bill as amended do pass.

The amendment to the text strikes out all after the enacting clause of the bill and inserts in lieu thereof the following:

That this Act may be cited as the "Manufacturing Sciences and Robotics Research and Development Act of 1984".

FINDINGS

SEC. 2. (a) The Congress finds that—

(1) manufacturing contributes significantly to the Nation's gross domestic product and employs more than one-fifth of the Nation's workforce;

(2) transportation and delivery of manufactured goods are vital components of the Nation's interstate commerce;

(3) while manufacturing industries are essential to the economic well-being of the Nation, many manufacturing processes and methods are no longer capable of producing goods as reliable and cost competitive as those produced by foreign industries which utilize modern manufacturing methods and processes;

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(4) domestic manufacturing is increasingly threatened by external competition and the development by foreign countries of more efficient manufacturing processes and technologies;

(5) outdated manufacturing methods and processes result in higher costs and in goods and services of inferior quality, to the detriment of consumers of such goods and services;

(6) outdated and inefficient manufacturing processes hinder domestic commerce;

(7) a decline in consumption of domestic manufactured goods due to outdated manufacturing processes produces a resultant decline in transportation;

(8) various sectors of private industry, the Federal Government, and the United States research establishment have not devoted sufficient attention to research on developing new processes and methods to improve the Nation's capability to manufacture goods;

(9) domestic manufacturers have not sufficiently utilized such recent technological changes in manufacturing as programable automation, robotics, advanced sensors, and computer-assisted design and manufacturing; and

(10) a program to conduct research in more advanced manufacturing processes and methods and to encourage research utilization would strengthen commerce and be beneficial to the Nation's consumers.

(b) The Congress further finds that—

(1) the widespread implementation of robotics and automated manufacturing technology and other practices and activities to implement improved manufacturing methods and processes, including new metallurgical technology, and processes for new non-metallic materials, including composite materials and ceramics, can improve productivity, enhance quality, and increase competitiveness in a wide variety of domestic manufacturing industries;

(2) because robotics and automated manufacturing systems and other practices and activities to implement improved manufacturing methods and processes, including new metallurgical technology, and processes for new non-metallic materials, including composite materials and ceramics, affect widely divergent segments of industry, a program fostering these technologies should be of broad benefit to domestic manufacturing firms;

(3) a national program of research and information dissemination in robotics and automated manufacturing systems and other practices and activities to implement improved manufacturing methods and processes, including new metallurgical technology, and processes for new non-metallic materials, including composite materials and ceramics, is essential to insure the timely and widespread implementation of these technologies; and

(4) to insure the success of this program, the active participation and support of industry, universities, labor, and government are required.

PURPOSE

SEC. 3. It is the purpose of this Act to establish a program for conducting research and other activities which will produce more advanced manufacturing technologies and for conducting research on utilization activities to encourage widespread adoption of these technologies.

DEFINITIONS

SEC. 4. As used in this Act—

(1) the term "Advisory Committee" means the Manufacturing Sciences and Technology Enhancement Advisory Committee established under section 9;

(2) the term "consortium" means a group of institutions consisting of a nonprofit research institution and such other entities as States, or subdivisions thereof, individual firms or industry associations, other nonprofit research institutions, and universities and other higher education institutions (including two- and four-year colleges);

(3) the term "Center" means a Center for Manufacturing Research and Technology Utilization established under section 5(c);

(4) the term "Office" means the Office of the Assistant Secretary for Productivity, Technology, and Innovation within the Department of Commerce;

(5) the term "robot" means a programable, multifunction manipulator designed to move material, parts, tools, or specialized devices through variable programed motions for the performance of a variety of tasks;

(6) the term "robotics" means the study of robots or the practice of using robots;

(7) the term "automated manufacturing system" means two or more operating stations of robots or fixed sequence automatic machines interconnected by a transport system, where both the operating stations and the transport system are controlled by a computer which performs such functions as production planning, task scheduling, and control of part and tool movement;

(8) the term "technology-sensitive industrial sector" means an industry whose productivity, efficiency and competitiveness, particularly in the world marketplace, is or is likely to be dependent upon the utilization of more advanced manufacturing processes and methods, as that term is defined under section 5(a); and

(9) the term "Secretary" means the Secretary of Commerce.

GRANTS, CONTRACTS, AND COOPERATIVE AGREEMENTS

SEC. 5. (a) PURPOSES.—The Secretary, through the Office, may award grants and enter into contracts and cooperative agreements in accordance with the provisions of this section to provide for research on advanced manufacturing processes and methods, including—

(1) computer-assisted design;

(2) automated materials handling, processing, and assembly;

(3) automated testing;

(4) machine adaptive learning;

(5) integrated manufacturing sytems, including interface of automated machines with automated and nonautomated machines, with production and design personnel, and with other systems (including testing devices, design systems, and inventory control systems);

(6) machine and process control strategies;

(7) automated sensing of machine and process control and product testing;

(8) new metallurgical technology;

(9) processes for new non-metallic materials, including composite materials and ceramics;

(10) practices and activities to implement improved manufacturing methods; and

(11) such other research as the Secretary determines to be consistent with the purpose of this Act.

(b) GRANTS.—(1) The Secretary, through the Office, may make grants to provide for research to increase the amount of fundamental scientific and technological knowledge in fields relevant to manufacturing methods and processes. Such grants shall be made on a competitive basis to applicants who comply with such criteria as are specified in this Act and as the Secretary shall establish, consistent with the purpose of this Act.

(2) A recipient of such a grant may be affiliated with a nonprofit research institution, a private firm or industry association, a university or college, a Center established pursuant to subsection (c), or any other institution which the Secretary considers appropriate. Any such recipient shall not be required to provide any part of the costs of such research, unless the recipient desires to expand the scope of the research to be conducted. In such a case, the Secretary may enter into an agreement which provides for the cost sharing by the recipient.

(3) Grants made under this subsection shall be based on the findings of the competitiveness study under section 8 to the extent practicable and on the recommendations of the Advisory Committee established under section 9.

(4) There are authorized to be appropriated for the purposes of this subsection not to exceed $20,000,000 for the fiscal year ending September 30, 1985, and not to exceed $30,000,000 for each of the fiscal years ending September 30, 1986, September 30, 1987, and September 30, 1988. Such funds shall remain available until expended.

(c) COOPERATIVE AGREEMENTS.—(1) The Secretary, through the Office, may enter into cooperative agreements with consortia for the purpose of establishing and supporting Centers for Manufacturing Research and Technology Utilization. Such agreements shall be made with applicants who compiy with such criteria as are specified in this Act and as the Secretary shall establish, consistent with the purpose of this Act.

(2) Such Centers shall conduct research of a more applied nature than the research conducted under subsection (b). Centers shall conduct research on methods of increasing the utilization by the Nation's industries of those modern manufacturing methods which may result in lower production costs or improved product quality or reliability. Such research may be directed toward problems or processes and meth-

ods appropriate to a specific industrial sector, including aerospace, microelectronics, apparel mechanical assembly, basic materials, new materials, and transportation.

(3)(A) In addition to funds received by means of a contract or cooperative agreement entered into under this subsection, a consortium may also receive funds from other Federal agencies and from public and private institutions.

(B) A consortium which enters into such a cooperative agreement shall provide support and participation in a dollar amount at least equal to the amount of the Federal contribution to be made under this subsection. For purposes of this subparagraph, the term "support and participation" includes cash or equipment contributions, industry personnel to conduct research, and access by persons in the research institutions to modern manufacturing equipment in the participating industry for research and other appropriate purposes. Any such consortium shall provide a cash or equipment contribution in an amount equal to at least 50 percent of the Federal Government's share. Contributions from the nonprofit participants of the consortium may consist of inkind contributions.

(4) In entering into agreements under this subsection, the Secretary shall consider (with respect to each such agreement)—

(A) the quality of the research which is to be undertaken as a result of the agreement;

(B) the extent of participation by industy in the research to be undertaken as a result of the agreement;

(C) the size of the industrial sector involved and the potential impacts on the productivity of that industrial sector as a result of successful research undertaken through the agreement, as well as the subsequent development and utilization of the manufacturing methods and processes to be studied as part of such research; and

(D) the extent to which entering into the agreement would be likely to increase the number of scientific and technical personnel capable of utilizing modern manufacturing methods and processes.

In addition, the Secretary shall consider the extent to which the industrial sector involved is presently competively disadvantaged as a result of foreign technological advances and shall ensure diversity among the industrial sectors which are the subject of the research conducted under any such agreement, as well as geographic dispersion of the Centers established and supported under this subsection.

(5) Cooperative agreements entered into under this subsection shall be based on the findings of the competitiveness study under section 8 to the extent practicable and on the recommendations of the Advisory Committee established under section 9.

(6) There are authorized to be appropriated for the purposes of this subsection not to exceed $15,000,000 for the fiscal year ending September 30, 1985, and not to exceed $25,000,000 for each of the fiscal years ending September 30, 1986, September 30, 1987, and September 30, 1988.

(d) CONTRACT AUTHORITY.—To the extent provided in advance by appropriations Acts, the Secretary, under such regulations as the Secretary may prescribe, may enter into contracts with applicants to effectuate the purposes of this Act.

(e) FEDERAL RESEARCH CENTER ON ROBOTICS AND AUTOMATED MANUFACTURING.—(1) There shall be a Federal Research Center on Robotics and Automated Manufacturing at the National Bureau of Standards. The Center shall focus its research and development on (A) measurements and standards required in robotics and automated manufacturing systems, including interface standards for integrated robot systems, and (B) systems integration, reliability, and performance.

(2) The Center shall coordinate its research activities with the Centers described in subsection (c) and shall share information through meetings, exchange of scientists, and network computer systems.

(3) The Director of the Center shall meet at least annually with the directors of the Centers described in subsection (c) to exchange specific plans and programs for the upcoming year to coordinate activities.

ROBOTICS AND AUTOMATED MANUFACTURING

SEC. 6. (a) SUPPORT.—The Secretary is authorized to support the education and training of scientiets, engineers, and technicians needed for the theoretical understanding, design, construction, installation, use, and maintenance of robots and automated manufacturing systems. Such support may include, but need not be limited to, providing funds for the following: Graduate fellowships and traineeships, undergraduate scholarships, instructional equipment, the development of curricula for intramural or extramural use at undergraduate and graduate levels, and postdoc-

toral fellowships. Such support shall be provided on a matching basis with other sources of support, whenever possible.

(b) AUTHORIZATION.—There is authorized to be appropriated for purposes of this section not to exceed $5,000,000 for the fiscal year ending September 30, 1985, not to exceed $7,000,000 for the fiscal year ending September 30, 1986, and not to exceed $10,000,000 for each of the fiscal years ending September 30, 1987, and September 30, 1988. Such funds shall remain available until expended.

ADVANCED MANUFACTURING METHODS RESEARCH UTILIZATION PROGRAM

SEC. 7. (a) ACTIVITIES.—The Secretary shall establish a program to identify the impact on workers of enhanced utilization of technologically advanced manufacturing methods, including the potential for retraining workers who might otherwise be displaced. The Seccretary may, to the extent provided in advance in appropriation Acts, contract with any appropriate person or institution (including States and consortia established under section 5(c)) to carry out such program.

(b) REPORT.—Not later than 2 years after the enactment of this Act, the Secretary shall submit to the Congress a report on such program.

(c) AUTHORIZATION.—There is authorized to be appropriated for the purposes of this section not to exceed $10,000,000 for the fiscal year ending September 30, 1985. Such funds shall remain available until expended.

COMPETITIVENESS STUDY

SEC. 8. (a) STUDY.—The Secretary shall select specific domestic technology-sensitive industrial sectors, and shall analyze such sectors' long-term capability for remaining competitive and identify technological advances with might be needed to keep such sectors competitive, especially with industries in foreign countries. In making such selection, the Secretary shall consider industrial sectors which are or are likely to be vulnerable to foreign competition, as well as sectors which are likely to experience rapid and significant growth.

(b) SUBJECTS OF STUDY.—As part of such study, the Secretary shall consider—

(1) the adequacy of technologies utilized to produce the goods and services of the sectors involved;

(2) the existence of superior foreign technologies or unique resources which yield a competitive advantage to industries in foreign countries over comparable domestic industries;

(3) the anticipated scientific and technical personnel requirements for such sectors;

(4) the adequacy of Federal laws and regulations, and the enforcement of such laws and regulations, in promoting technological innovations and commercial competitiveness by such sectors; and

(5) the need for changes in such laws and regulations, or enforcement of such laws and regulations, in order to promote technological innovation, and competition in such sectors and to safeguard the well-being of the Nation and the public.

(c) CONSULTATION.—As part of such study, the Secretary shall consult with and solicit comments from both management and labor representatives of the industrial sectors which are the subject of such study.

(d) AUTHORIZATION.—There is authorized to be appropriated for purposes of this section not to exceed $2,000,000 for each of the fiscal years ending September 30, 1985, September 30, 1986, September 30, 1987, and September 30, 1988. Such funds shall remain available until expended.

ADVISORY COMMITTEE

SEC. 9. (a) ESTABLISHMENT.—The Secretary shall establish a Manufacturing Science and Technology Enhancement Advisory Committee to advise the Secretary concerning the activities to be conducted under this Act. The Advisory Committee shall have 12 members and shall include at least 3 representatives each from the manufacturing research community, from labor, and from management of technology-sensitive industrial sectors identified under the terms of this Act. Such members shall receive no compensation and shall be appointed for terms of 6 years, except that of the members first appointed four shall be appointed for terms of 2 years, two shall be appointed for terms of 4 years, three shall be appointed for terms of 5 years, and three shall be appointed for terms of 6 years. Any such member shall, in accordance with section 5703 of title 5, United States Code, be entitled to reimburse-

ment for travel or transportation expenses incurred in the performance of responsibilities as a member of the Advisory Committee.

(b) FUNCTIONS.—The Advisory Committee shall—

(1) recommend to the Secretary policies and selection criteria for individual industrial sectors in need of assistance under section 5 of this Act;

(2) review the progress of the Secretary in meeting all the requirements of this Act;

(3) assess the effectiveness of the activities funded pursuant to this Act; and

(4) submit to the Secretary, at least annually, evaluations and recommendations regarding activities carried out under this Act.

(c) REPORT.—The Advisory Committee shall submit to the Congress an annual report on its activities under this Act.

(d) APPLICABILITY.—The Advisory Committee shall be subject to the Federal Advisory Committee Act (5 U.S.C. App. 1 et seq.).

And amend the title to read as follows:

An Act to establish a program to conduct research and development for improved manufacturing technologies, to foster the development and use of robots and automated manufacturing systems, and for other purposes.

II. PURPOSE AND DESCRIPTION OF MAJOR PROVISIONS OF THE BILL

The purpose of the bill is to restore American technological leadership and innovation in manufacturing through research and education activities and to foster the development and use of robots and automated manufacturing systems.

S. 1286, as reported by the Committee on Science and Technology, authorizes the Office of the Assistant Secretary of Commerce for Productivity, Technology and Innovation (OPTI), within the Department of Commerce, to fund through grants and cooperative agreements, basic and applied research on manufacturing technologies, in universities, non-profit institutions, firms, industry associations, and other institutions. The Secretary of Commerce is directed to award such grants and enter into such contracts with applicants who meet the criteria of the Act.

The bill authorizes the Secretary of Commerce to enter into cooperative agreements with consortia (defined as groups consisting of a non-profit research instituiton and such other entities as States or subdivisions thereof, industry, industry associations, other non-profit research institutions, and universities and other high education institutions, including two and four year colleges) to establish and support geographically distributed centers. These centers will conduct research on new technologies and/or on methods of increasing the utilization by private industry of existing advanced manufacturing methods. The research carried out at the centers may be directed to the needs of a particular industrial sector.

S. 1286 establishes a Federal Research Center on Robotics and Automated Manufacturing at the National Bureau of Standards to focus on measurements and standards required in robotics and automated manufacturing systems, including interface standards for integrated robot systems and systems integration, reliability, and performance. A provision for funding of education and training in robotics and automated manufacturing is included.

The legislation authorizes the Secretary of Commerce to establish a program to study the impact of advanced manufacturing methods on workers, including the potential for retraining dis-

placed workers, and to submit a report to the Congress no later than two years after enactment of the bill.

The Secretary of Commerce is also authorized to study the technological competitiveness of selected industry sectors and to establish a Manufacturing Sciences and Technology Enhancement Advisory Committee. The Advisory Committee is to recommend to the Secretary policies and selection criteria for individual industrial sectors in need of assistance; assess the effectiveness of the programs funded under the Act; and submit an annual report to the Congress.

The bill authorizes on a program-by-program basis funding totaling $250 million: $52 million in 1985; $64 million in 1986; and $67 million in 1987 and 1988.

III. Legislative History

S. 1286, the "Manufacturing Sciences and Technology Research and Development Act of 1983", was introduced on May 16, 1983 by Senator Slade Gorton, and hearings were held by the Senate Subcommittee on Science, Technology and Space on June 21, 23, November 23, December 6, and 7, 1983. On March 27, 1984, the Committee on Commerce, Science, and Transportation ordered S. 1286 reported with an amendment in the nature of a substitute, and S. Rept. 98–431 was filed on May 8, 1984. S. 1286 was referred to the Committee on Science and Technology.

H.R. 4415, the "Manufacturing Sciences and Technology Research and Development Act of 1983", which is the House counterpart to S. 1286, was introduced by Congressman Don Fuqua on November 16, 1983, and the bill was referred to the House Committee on Science and Technology. On June 13 and 14, 1984, the Subcommittee on Science, Research and Technology held hearings on H.R. 4415 and S. 1286, as well as H.R. 4047, the "Robotics and Automated Manufacturing Systems Research and Education Act of 1983", which was introduced by Mr. Fuqua on September 30, 1983 with Mr. Brown of California, Mr. Gore, Mr. MacKay, and Mr. Boehlert as cosponsors. The bill was referred to the Committee on Science and Technology.

Based upon recommendations received at the hearings, the Subcommittee marked up S. 1286 on July 25, 1984 and reported out an amendment in the nature of a substitute of S. 1286. The substitute retained provisions from H.R. 4047 relating to robotics and eduction and training. The bill also includes language meant to broaden the meaning of the term "industrial sector" to include such industries as, for example, the apparel industry. The Subcommittee ordered the bill reported by voice vote to the Committee on Science and Technology as an amendment in the nature of a substitute.

On August 8, 1984, the Full Committee marked up the bill and adopted an amendment designed to focus the purpose of the legislation on programs to conduct research on Manufacturing technologies and utilization activities rather than to conduct experimental utilization activities. Another amendment was adopted which serves to broaden the scope of the technologies which could receive assistance under the bill, and to include practices and activities to

implement manufacturing methods and processes, including new metallurgical technologies and processes for nonmetalic materials.

The Committee also agreed to an amendment which requires that the grants and cooperative agreement under the bill be based upon the findings of the competitiveness study to the extent practicable and on the recommendation of the Advisory Committee. The Committee believes that the government actions aimed at improving technology development should proceed based on accurate data, and the the competitiveness study called for in the bill should become an important tool to assist the granting and cooperative relationship between government, management, labor, and others which should be established under the Advisory Committee should also be an important tool to assist the Secretary in decision-making under this Act. It is the intention of the Committee to emphasize the need for flexibility in the interpretation of the words "based on" in order that the bill language not be unduly restrictive.

Another amendment adopted requires that the Secretary consult with both management and labor representatives for a particular industrial sector during the course of the competitiveness study. It also specifies that the Advisory Committee consist of twelve members to serve for balanced periods of staggered six-year terms, and requires that the committee be balanced in representation from research, management, and labor concerns.

The Committee concluded consideration of the bill, but since a quorum was not present, it was not ordered reported. On September 29, 1984, a quorum being present, the Committee ordered the bill favorably reported by a vote of 29 yeas to 10 nays.

IV. Background and Need for the Legislation

The Manufacturing industry directly contributes one-fourth of the U.S. GNP and over one-fifth of all our jobs. Furthermore, and our manufacturing industries are important to the military strength of the country, and to our readiness to cope with all manner of national emergencies. The arrival of the information age notwithstanding, strong basic and "high tech" industries are the underpinning of our economy.

The nature and place of manufacturing in the U.S. economy is changing, and not all of the changes are for the better. For example, industrial production as percentage of U.S. GNP grew steadily throughout the twentieth century, from 16% in 1920 to a high of 26% during the mid-1970's. (There was a temporary peak of nearly 37% during the World War II mobilization, but this quickly returned to the historical trend shortly after the war.) Since 1980, however, this proportion has declined to around 23%, the sharpest decline since the Great Depression. In part, this recent decline in manufacturing's contribution to GNP reflects the great sensitivity of industrial production to cyclic economic downturns, and an important part of this decline has been made up during the recent recovery.

At the same time, however, there is evidence from the poor condition of a number of domestic industries and from the experiences of a number of competitor countries that fundamental shifts are occurring in some of the manufacturing industries worldwide. These

shifts can be attributed in part to the inevitable maturing of traditional industries, but they also result from the failure of certain U.S. industries to develop and/or make use of new technologies that would allow them to maintain their strong competitive positions.

The success of the twentieth century American system of manufacturing—which is based on mass production, the division of labor, the assembly line, and highly integrated production facilities—contains the seeds of its own competition from firms outside the country. The effectiveness of this approach to manufacturing depends in large measure on its application to the manufacture of relatively stable product lines with little or no technological change, because changes in the production system to accommodate product innovation become very expensive. Furthermore, the American system of manufacturing attempts to use the high degree of division of labor to eliminate the need for skilled workers in order to reduce training costs and make plants operable without specialized employees. Competition in industries operated by this philosophy is based heavily on price/quality relationships and on mass marketing. The focus on low cost and on use of unskilled labor makes U.S. industries vulnerable to competition from firms in nations that have low labor costs when those nations reach a level of development that allows them to manage quality adequately. The dependence on mass marketing makes U.S. industries vulnerable to competition based on the "cachet" and image of foreign-made goods, even when the latter sell for higher prices, so long as they offer something new and unique. Many competitor nations, such as Japan, Italy, and South Korea have made skillful use of these characteristics of mass production to enter U.S. markets in such product lines as automobiles, consumer electronics, shoes and apparel. Another class of American manufacturing industry that is expecially vulnerable to inroad from foreign competition includes firms that produce relatively simple goods in small to intermediate volume using production methods that are labor-intensive. These include such industries as apparel, auto parts, hardware, and household goods. Little attention has been paid to upgrading the production technologies used in these industries.

Fortunately, new technologies such as flexible manufacturing, CAD/CAM, and robotics promise the possibility of substantial quality improvements and labor savings which can return these kinds of industries in the U.S. to positions of world prominence. However, the technical capabilities of such firms are typically limited to competent operation of traditional technologies. To bring them up to the state-of-the-art will require pooling of their technical resources, and access to the advanced technical knowledge available in our universities and our national laboratories such as the National Bureau of Standards. The cooperative Centers for Manufacturing Research and Technology Utilization and the Federal Research Center on Robotics and Automated Manufacturing envisioned in S. 1286 would provide major assistance to such firms in their efforts to upgrade their manufacturing technologies.

JOBS AND ADVANCED MANUFACTURING TECHNOLOGIES

Even as the contribution of the manufacturing industry to the nation's GNP increased over the past several decades, its importance as a generator of new jobs has steadily declined. To illustrate this fact, in the mid-50's as much as 35% of the workforce was employed in manufacturing. This fraction declined steadily through both boom and bust periods, and by 1983 it had dropped to slightly over 20%. During this same period, of course, the total U.S. workforce expanded substantially and the number of persons employed in manufacturing has remained roughly unchanged. Nevertheless, increases in manufacturing labor productivity throughout the last several decades have allowed for major growth in manufacturing output, while employment in the sector has remained essentially the same.

There is little reason to expect a resurgence in the rate of growth of employment in manufacturing industries. However, unless those industries modernize, the prospects are for much more rapid declines in jobs in them as their markets are captured by low-wage foreign competitors. Indeed, the advanced manufacturing methods, toward which the R&D supported by this bill would be directed, will further enhance labor productivity and are likely to displace additional workers in some firms and industries. Furthermore, the advanced technologies, created as a result of R&D under this bill, will create jobs in the industries that make manufacturing equipment, and will also allow for growth in employment in some manufacturing industries due to improved product quality and better matching to market needs that will more than compensate for the decline in employment per unit of production; i.e., for jobs losses due to increases in labor productivity.

The Committee recognizes, however, that workers are concerned about the potential impacts of advanced manufacturing technologies on both job opportunities and the quality of working life. While the overall impact of advanced manufacturing technologies on both jobs and economy will be positive, the Committee strongly supports the need to improve our understanding of the factors that influence the adoption of advanced manufacturing technologies in industry, especially the effects on adoption due to the fear of adverse effects on workers. Thus, the bill includes a requirement that the Secretary of Commerce do a study of the major factors that influence the adoption of such technologies, with full consideration of the concerns of workers, both those now employed in manufacturing and those for whom industrial revitalization offers the promise of new job opportunites in the future.

In the Committee's view, it is important that the country strengthen its abilities to develop and make good use of advanced manufacturing and robotics technologies in a broad spectrum of industries. The Committee believes that the primary responsibility for carrying out this important job lies with private industry. However, the Federal government can make significant contributions to this challenge by supporting programs of research and development of these topics involving firms, universities, industries associations, and selected national laboratories, and by supporting our colleges, universities and technical schools in their efforts to up-

grade and improve the education and training of engineers, scientists and technicians who will staff our manufacturing firms and laboratories in the future. The Committee is enthusiastic about the opportunities that this bill provides and looks forward to vigorous action by this and future Administrations to carry it out.

V. Summary of Committee Action

The Committee adopted several amendments which would focus the purpose of the bill on programs to conduct research on manufacturing technolgies and utilization activities rather than to conduct experimental utilization activities. This narrower approach was felt to be the most appropriate role of the Federal government to carry out. The committee changes effectively elimate any semblance of government intervention, and also remove language from the Senate bill that some thought might place the federal government in the position of ". . . selecting Technology winners and losers." as pointed out in the letter from the Department of Commerce addressed to the Senate passed bill, dated July 17, 1984. Language was added to broaden the areas of technology which could receive assistance under this bill to include metallurgical technology and processes for new non-metallic materials. The term "technology-sensitive industrial sector" was further defined to include the garment or apparel industry. Another amendment adopted strengthens the linkage between the assistance provided under the bill and the competitiveness study and the Advisory Committee called for in the bill. This amendment requires that the grants and cooperative agreements authorized by the Secretary be based on the recommendations of the Advisory Committee. Language was also added which calls for the Secretary to consult with both management and labor representatives during the course of the competitiveness study, and spells out the number and term requirements for the Advisory Committee.

The Committee intends that qualified Federal entities, such as the Tennessee Valley Authority, would be eligible for selection by the Secretary as a grantee, contractee, or participant in a Center for Manufacturing Research and Technology Utilization under sections five and six of the bill. Entities like TVA, which should be considered to be a "nonprofit research institution" or "research organization" for the purposes of the bill, are uniquely qualified to conduct projects in a variety of fields, including chemical, fertilizer, agronomic, and alcohol-from-biomass research and development; nitrogen fixation studies; technology transfer activities; and the development and implementation of high-technology training demonstration programs.

VI. Sectional Analysis of the Bill

Section 1

Cites the short title as the "Manufacturing Sciences and Robotics Research and Development Act of 1984."

Section 2

Finds that manufacturing is a significant element of the Nation's economic well-being, but that domestic manufacturing is threatened by foreign competition due, in part, to outdated methods and processes. Furthermore, that the implementation of robotics and automated manufacturing technology, including new metallurgical technology, can improve productivity and increase competiveness.

Section 3

States the purpose of the Act as establishment of a program to conduct research in manufacturing technologies.

Section 4

Defines "Consortium" as a group of institutions that include a nonprofit research institution and other entities; "robotics" as the study of robots or the practice of using robots; "automated manufacturing system" as two or more operating stations of robots or automatic machines interconnected by a transport system and controlled by a computer which performs such functions as production planning, task scheduling, and control of part and tool movement; "technology-sensitive industrial sector" as an industry whose competitiveness is or is likely to be dependent upon more advanced manufacturing processes; and contains other definitions.

Section 5

Authorizes funding for the Secretary to award grants and enter into contracts and cooperative agreements to provide for research on advanced manufacturing processes and methods and includes several fields relevent to manufacturing methods processes. The Secretary is directed to award such grants on a competitive basis to applicants who meet the criteria of the Act.

Authorizes funding for the Secretary to enter into cooperative agreements with consortia for the purpose of establishing Centers for Manufacturing Research and Technology Utilization.

Authorizes the establishment of a Federal Research Center on Robotics and Automated Manufacturing at the National Bureau of Standards to focus research on measurements and standards and to coordinate its research activities with the Centers of Manufacturing Research and Technology Utilization.

Section 6

Authorizes funding for the Secretary to support the education and training of scientists, engineers and technicians needed for the design, construction, installation, use, and maintenance of robots and automated manufacturing systems.

Section 7

Authorizes funding for a program to identify the impact on workers of technologically advanced manufacturing methods, including the potential for retraining workers who might be displaced, and for the Secretary to submit to the Congress a report on such program within two years of enactment of this Act.

Section 8

Authorizes funding for the Secretary to conduct assessments of the long term competitiveness of domestic technology-senstitive industrial sectors.

Section 9

Establishes the Manufacturing Science and Technology Enhancement Advisory Committee to recommend to the Secretary policies and selection criteria for industrial sectors which qualify under section 5.

VII. Effect of Legislation on Inflation

In accordance with Rule XI, Clause 2(l)(4), of the Rules of the House of Representatives, this legislation is assessed to have no adverse inflationary effect on prices and costs in the operation of the national economy.

VIII. Committee Oversight Findings and Recommendations

Pursuant to Rule XI, Clause 2(l)(3)(A), and under the authority of Rule X, Clause 2(b)(1) and Clause 3(f), of the Rules of the House of Representatives, the following statement on oversight activities is made:

The Committee's oversight findings and recommendations are contained in the body of this report.

IX. Oversight Findings and Recommendations by the Committee on Government Operations

No statement of findings and recommendations on oversight activity have been submitted by the Committee on Government Operations for inclusion in this report, pursuant to Rule X, Clause 2(b)(2), and Rule XI, Clause 2(l)(3)(D) of the Rules of the House of Representatives.

X. Budget Analysis and Projection

S. 1286 provides no new budget authority or tax expenditures. Consequently, the provisions of section 308(a) of the Congressional Budget Act are not applicable.

XI. Congressional Budget Office Cost Estimate

U.S. Congress,
Congressional Budget Office,
Washington, DC, September 20, 1984.

Hon. Don Fuqua,
Chairman, Committee on Science and Technology, U.S. House of Representatives, 2321 Rayburn House Office Building, Washington, DC.

Dear Mr. Chairman: The Congressional Budget Office has prepared the attached cost estimate for S. 1286, the Manufacturing Sciences and Robotics Research and Development Act of 1984.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

ERIC HANUSHEK
(For Rudolph G. Penner, Director).

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: S. 1286.

2. Bill title: Manufacturing Sciences and Robotics Research and Development Act of 1984.

3. Bill status: As ordered reported by the House Committee on Science and Technology, September 20, 1984.

4. Bill purpose: S. 1286 would establish a program within the Department of Commerce (DOC) to conduct research and to provide educational activities for improving manufacturing technologies. The Secretary of Commerce would be authorized to award grants and contracts totalling $20 million in 1985 and $30 million in each of the years 1986 through 1988, and to enter into cooperative agreements totalling $15 million in 1985 and $25 million in each of the years 1986 through 1988. To support education and training related to robotics and automated manufacturing, the bill would authorize $5 million in 1985. $7 million in 1986, and $10 million in each of the years 1987 and 1988.

S. 1286 would also require the Secretary of Commerce to establish a program of experimental activities to identify the most feasible means of improving technologically advanced manufacturing methods, and would authorize the appropriation of $10 million in 1985 for this purpose. The bill would also authorize the appropriation of $2 million in each of the years 1985 through 1988 for the DOC to conduct studies of various industrial sectors considered vulnerable to foreign competition.

5. Estimated cost to the Federal Government:

[By fiscal years, in millions of dollars]

	1985	1986	1987	1988	1989
Authorization level	52	64	67	67	.....
Estimated outlays	13	37	58	65	50

In addition to the amounts specifically authorized, the bill would require the Secretary of Commerce to establish a Manufacturing Sciences and Technology Enhancement Advisory Committee to annually evaluate and recommend activities to be carried out under this act. It is estimated that approximately $200,000 would be required for the advisory committee each year.

The costs of this bill fall within budget function 370.

Basis of estimate: For purposes of this estimate it was assumed that the amounts authorized in the bill would be appropriated for each fiscal year. Outlays were estimated to be 25 percent the first year, 40 percent the second year, 30 percent the third year, and 5 percent in the fourth year.

6. Estimated cost to State and local governments: States would be allowed but not required to participate in certain programs authorized by S. 1286. It is not possible at this time to estimate the level of participation.

7. Estimate comparison: None.

8. Previous CBO estimate: On April 25, 1984, CBO prepared a cost estimate for S. 1286, as ordered reported by the Senate Committee on Commerce, Science and Transportation, March 27, 1984. The estimated authorization level for that version of S. 1286 was $47 million in 1985 and $57 million in each of the years 1986 through 1988. Estimated outlays were $12 million, $33 million, $51 million, and $43 million in the years 1985 through 1989, respectively.

9. Estimate prepared by: Mary Maginniss.

10. Estimate approved by: C.G. Nuckols (for James L. Blum, Assistant Director for Budget Analysis).

XII. Committee Recommendation

A quorum being present, the bill was ordered favorably reported on September 20, 1984 by a vote of 29 yeas to 10 nays.

XIII. Administration Views

General Counsel of the
U.S. Department of Commerce,
Washington, DC, July 17, 1984.

Hon. Doug Walgren,
Chairman, Subcommittee on Science, Research and Technology, House of Representatives, Washington, DC.

Dear Mr. Chairman: The Department of Commerce has reviewed S. 1286, as passed by the Senate, a bill "To establish a program to conduct research and development for improved manufacturing technologies, and for other purposes," and we hereby submit our views on this legislation.

S. 1286 would authorize the Secretary of Commerce to award grants and enter into cooperative agreements with the private sector to promote research on manufacturing technology. It would direct the Secretary to (a) maintain an automated manufacturing research program at the National Bureau of Standards (NBS), (b) conduct experimental research on technologically-advanced methods and processes, and (c) identify the potential for retraining workers displaced by advanced manufacturing technology. S. 1286 also would direct the Secretray to make competitive studies to determine the vulnerability of certain domestic technologically-sensitive industries to foreign competition and the likelihood of these industries to experience rapid and significant growth. In addition, the bill would establish a Manufacturing Sciences and Technology Enhancement Advisory Committee to advise the Secretary concerning the activities to be carried out pursuant to S. 1286. Appropriations would be authorized for fiscal years 1985 through 1988 for each of these programs.

While the Department of Commerce agrees with the intent of S. 1286 to the extent that it would promote a healthy and competitive

manufacturing sector, we question the means to obtain this objective. Accordingly, we oppose enactment of S. 1286.

S. 1286 is based upon the premise that the federal government should adopt an industrial policy to guide our nation's technologucal development. While we agree that selected manufacturing industries face serious problems, we believe the federal government should not be in the position of deciding the composition of U.S. industry. This Administration prefers to rely on the market to allocate resources and believes the problems faced by U.S. industry can be solved through sound monetary and fiscal policies.

Specifically, we do not support S. 1286 because (a) Administration initiatives already in place or proposed represent more appropriate methods of stimulating research in all technologies, including manufacturing technologies, (b) the bill would intervene in the private sector—it would create a federal agency with the responsibility of assessing the complex factors which determine the most feasible means of enhancing the use of technologically-advanced manufacturing methods, and (c) it would result in additional costs to the federal government for problems which duplicate current efforts believed to be effective.

The Administration has supported programs to enhance innovation in all types of technology, including technologically-advanced manufacturing. These include retraining and education programs and expanded tax credits and expenditures for research and development.

Furthermore, we believe the federal government should not be placed in the position of selecting technology winners and losers. Regardless of their expertise, government officials do not have as much access as the entire marketplace to the diverse information about the factors needed for determining the success or failure of manufacturing technology methods. Government intervention such as that authorized by S. 1286 would represent a distortion of the private sector decision-making process.

Moreover, NBS already maintains an automated manufactruring research program which is aimed at developing generic measurement technology and standards for use by U.S. industry. The program is a cooperative effort with other federal agencies and the private sector and does not duplicate private sector efforts in this area. The Administration has requested funding for fiscal year 1985 in the amount of $6.1 million for NBS's automated manufacturing research activities, and so the provision directing that NBS maintain an automated manufacturing program is unnecessary. Furthermore, the President's Commission on Industrial Competitiveness is reviewing research and development, education and job training, and the advisability of structuring federal policies to make maximum use of the nation's labor force. Therefore, the advisory committee established to oversee the activities carried out under S. 1286 would merely duplicate existing initiatives and would be an unnecessary expenditure of federal funds.

We have been advised by the Office of Management and Budget that there is no objection to the submission of this report to the Congress from the standpoint of the Administration's program.

Sincerely,

IRVING P. MARGULIES,
General Counsel.

ADDITIONAL VIEWS OF HON. LARRY WINN, JR., RANKING MINORITY MEMBER, ON S. 1286

MANUFACTURING SCIENCES AND ROBOTICS RESEARCH AND DEVELOPMENT ACT OF 1984

I cannot give our full support to S. 1286. While S. 1286 does address very important topics in the realm of U.S. competitive advantages in international markets, I feel it is an inappropriate intervention by the federal government to achieve a laudable goal.

Secondly, I am concerned about the creation of duplicative engineering functions within the federal government. S. 1286 establishes "Centers for Manufacturing Research and Technology Utilization" which may conduct research on methods of increasing the utilization by the Nation's inefficient industries of those modern manufacturing methods which may result in higher product quality or reliability. The efforts of the research may be directed toward problems or processes and methods appropriate to specific industrial sector. There appear to be roles within the arena of basic and applied science, coupled with fundamental engineering, which this bill speaks to. Congress, in the National Science Foundation's FY 1985 request, approved the formation of interdisciplinary "Centers for Engineering". I believe there is a very appropriate role for the National Science Foundation to play in attaining the goals of S. 1286. I regret that the Committee did not accept the amendment we offer at the Full Committee Markup which attempted to address this concern.

I believe that the purposes and goals of S. 1286 raise the need for an indepth examination of the Stevenson-Wydler Act as well as the role of NSF and the National Bureau of Standards. These are legislative and oversight responsibilities which the Committee has made commitments to address in the 99th Congress. The need to reauthorize Stevenson-Wydler, therefore, offers the opportunity to incorporate the appropriate sections of S. 1286. I believe it more appropriate to wait until that time to proceed further with S. 1286.

LARRY WINN, Jr.